

What is claimed is

1. A polish cleaning apparatus for cleaning a HGA (head gimble assembly) in a head comprises:
  - 5 a frame;
  - a plurality of carriers for precisely locating and holding a plurality of HGAs, respectively, said HGAs having a face, a slider ABS surface, to be polished, directed downwards;
  - a plurality of polish fingers under said carriers, fixed on a loading base;
  - 10 a kind of polyester cloth wrapped on said polish fingers as a polish medium to provide a plurality of polish surfaces, on which said HGAs are polish cleaned;
  - a plurality of press-pin on each of said carriers, pressing on a HGA's flexure, respectively, to provide proper friction between said slider ABS surface and said polish surface;
  - 15 a pneumatic cylinder unit, combined with said carriers and controlled by a programmable controller, can bring said carriers, as well as said plurality of HGAs, to move back and forth in X and Y directions according to a program customized in advance;
  - a polish tank containing cleaning solution, positioned on the top of said frame,
  - 20 the solution is recirculated through a pump and a filter canister with an effective filter cartridge, and a thermostatically controlled strip heater for heating said solution to a desired working temperature.

2. A polish cleaning method used in said apparatus for cleaning a HGA (head gimbal assembly) in a head as claimed in claim 1, comprises steps:

5 precisely locating and holding a plurality of HGAs in a carrier, said HGAs having a face, a slider ABS surface, to be polished, directed downwards;

scrubbing off contaminants on said dirty slider surface being cleaned by a moving cloth strip , meanwhile smashes mass contaminants into tiny pieces;

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getting said contaminants scrubbed off into a solution through solubilization, emulsification, etc. chemical action by a detergent, temperature, kind and concentration of said detergent are selected to achieve maximum cleaning effectiveness;

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sufficiently agitating said solution to promote dissolution action by the motion of a cylinder unit;

filtering off the insoluble, suspended contaminants and particles in said solution  
20 by a filter canister in time so that said slider ABS surface will not be re-contaminated.